Big Data & the African Smallholder

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While much has been said and done about the potential mobile technology has to transform the lives of African smallholder farmers, the possibilities that big data bring to transform smallholders’ lives remain heavily under-researched.

By aggregating information about smallholder group behavior and using this to analyze value chain challenges and market failures, big data will provide a powerful opportunity to design innovative policies, products and responses to the barriers to lifting smallholders out of poverty. Big Data will especially improve access and opportunity for African women smallholders in areas such as financial inclusion, capacity development, climate resilience, and access to markets. With over half of Africa’s poor subsisting by farming, and over half of these farmers being women, it is important to critically analyze the tools and technologies that will change the way they live their lives in a fundamental way, and big data is evolving to become such a tool, so the research cannot be left behind.

This presentation will look closely at the evolving trends in the use of big data to design innovative policies and products for African smallholders, and then use this analysis to outline the specific ways in which big data can be used by policymakers, value chain actors, donors and other stakeholders to transform service delivery to African smallholders. The presentation will dissect the ways in which evolving value chains on the continent will impact smallholder access and use of big data, while addressing the challenges arising from the use of this big data in areas such as data privacy and security, regulatory frameworks, and sustainability. Primary and secondary sources will be used to inform the analysis the presentation will offer, with the aim of providing tools and strategies which members of the audience can use to integrate big data into their work, albeit with a critical lens.